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AN ANNOTATED CHECKLIST OF  
THE MACROHETEROCERA OF  
SOUTH-EASTERN ONTARIO

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INTRODUCTION

PROGRESS IN THEORETICAL ECOLOGY, community evolution and basic pollution research is seriously retarded by the absence of systematically collected, carefully documented population samples of sufficient size in both number of individuals and in species number. This is especially true for the animal kingdom.

Lepidoptera, especially night flying ones, are an admirably suitable taxocene for such research. Yet, even here, few collections are adequate in sampling technique, quantification and consistency, making it very difficult to use these collections for the formulation of generalizations concerning ecosystem or community structure.

In the past several years we have been conducting an intensive complete-season collecting program in an attempt to survey the macroheterocera fauna of the Kingston region. This forms part of a broader study on the effects of environmental disturbance on species diversity, and the evolution of community structure, the results of which will be published elsewhere. In this publication we wish to record the moth species collected, their flight periods and relative abundance, and notes on their life histories.

The list covers the south-eastern portion of southern Ontario, an approximately triangular area bordered by 75° 45'W longitude, 45° 00'N latitude, and the St. Lawrence River System (figure 1). This is a physiographically diverse area, with variably overlain Paleozoic sediments interrupted in the center of the

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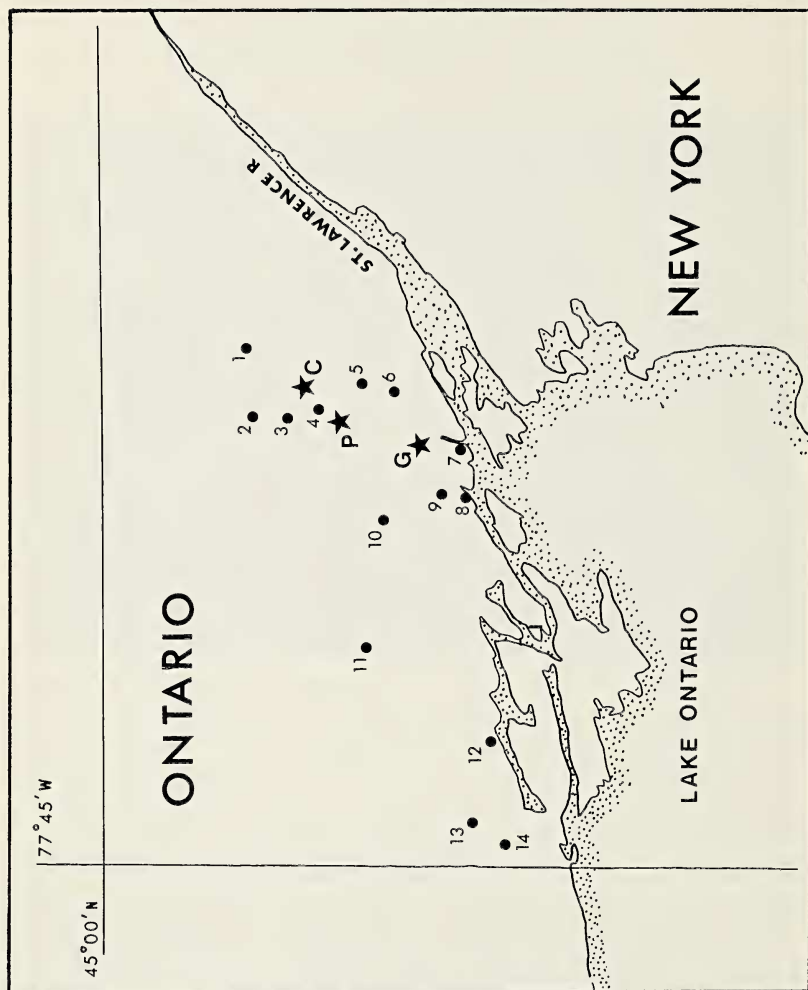


Fig. 1.—South-eastern Ontario, with the principal collecting sites G, P, and C. The fourteen other localities are as follows: 1) Portland, Leeds Co., 2) Westport, Leeds Co., 3) Bedford Mills, Frontenac Co., 4) Lake Opinicon, Frontenac Co., 5) Cranberry Lake, Frontenac Co., 6) Washburn, Frontenac Co., 7) Kingston, Frontenac Co., 8) Amherstview, Lennox & Addington Co., 9) Westbrook, Frontenac Co., 10) Harrowsmith, Frontenac Co., 11) Marlbank, Hastings Co., 12) Belleville, Hastings Co., 13) Frankford, Hastings Co., and 14) Wooler, Northumberland Co.

region by a protrusion of the Precambrian Shield. The predominant forest of white pine and northern hardwoods contains a considerable infusion of austral (Carolinian) elements (Snyder *et al.*, 1941; Soper, 1962; Harmsen, Hebert and Ward, 1974). Much of the original vegetation has been replaced by second growth forest and agricultural land.

The macroheterocera fauna of the area exhibits a remarkable species richness which coincides with a great regional diversity of plants (Beschel *et al.*, 1970) and birds (Quilliam, 1973). The south-eastern Ontario total of 820 + macroheteroceran species may be compared to Ferguson's (1955) listing of 764 species from the entire province of Nova Scotia and Moore's (1955) tabulation of 1006 species from the state of Michigan. Single-locality species totals for south-eastern Ontario (see below) are far in excess of those normally reported in the literature for temperate regions (e.g. Preston, 1948; Williams, 1964; McFarland, 1965; LaFrance, 1968).

#### METHODS

The bulk of the records is based on daily collections of nocturnal macrolepidoptera made by the authors over at least one complete collecting season (spring to autumn) at each of three collecting sites: Glenburnie, Perth Road and Chaffey's Locks, hereafter designated G, P, and C respectively (Table 1). The former is located in marginal agricultural land on Ordovician limestone, while P and C are situated in areas of mixed forest on Precambrian metamorphic rock. All specimens were collected with a 20-watt blacklight (GE FT20T12-BL) set against a white cloth background. The light was run all night and moths were collected off the screen at dawn.

We consider one complete sample of the fauna to consist of all macroheterocera collected over an entire season at one light. Thus site G was sampled once, C and P each four times. Altogether 101,862 individuals comprising 778 species were identified and recorded. The total numbers of species recorded in this manner from each collecting site are 427 (G), 571 (C), and 701 (P).

Additional material from G, C, and P was obtained by rearing immature stages, collecting diurnally, and collecting with light and bait outside the prescribed collecting schedule. Sporadic collecting has also been carried out at 14 other localities in

south-eastern Ontario (Figure 1). Most of these collections were made by the authors but some records from the Royal Ontario Museum, Toronto (ROM) (mostly collected by J.C.E. Riotte) and the Canadian National Collection, Ottawa (CNC) have also been included. These additional data bring the total number of recorded species to 822.

The majority of the material was identified by P.S.W. and P.D.N.H., utilizing particularly Forbes (1948, 1954, 1960), Ferguson (1955), McGuffin (1967, 1972), and access to the Canadian National Collection, Ottawa. Some difficult material was determined by specialists mentioned in the acknowledgements.

The families, genera, and species are arranged alphabetically, and subspecies names are not used. Nomenclature essentially follows McDunnough (1939), in conjunction with recent revisionary changes. Authors names have been omitted since all species names may be found in McDunnough (1938) or Forbes (1948, 1954) with the exception of the following: *Anisota finlaysoni* Riotte (1969); *Eupithecia rindgei* McDunnough (1949), *Semiothisa marmorata* Ferguson (1972), *Semiothisa pinostrobata* Ferguson (1972), *Semiothisa signaria* (Hübner) (= *S. dispuncta* (Walker)). *Thera juniperata* (Linnaeus) (= *T. procteri* Brower), *Helicoverpa zea* (Boddie) (= *H. obsoleta* of authors, not Fabricius), and *Hypenodes palustris* Ferguson (1954).

## THE CHECKLIST

In the following list, the numbers in parentheses after G, C, or P refer to the total numbers of individuals collected at each site under the prescribed collecting schedule. This gives a rough idea of relative abundances, but it is worth remembering that G was only sampled one year. If a species was only recorded from G, C, or P outside the collecting program this is indicated by a dash in parentheses. Records from the fourteen other collecting localities are usually only included if less than half a dozen individuals have been collected at G, C, and P.

## AGARISTIDAE

*Alypia octomaculata* C(-), P(-). Adults diurnal, May 10-Jun 26; reared from larvae on Vitis riparia

## ARCTIIDAE

*Apantesis anna* C(18), P(130). Jun 8-Jul 9.  
*Apantesis arge* G(20), C(5), P(4). May 8-14; Jul 23-Sep 6. Predominantly in late summer.  
*Apantesis celia* G(1), C(-), P(28). May 31-Jun 24.  
*Apantesis nais* C(58), P(228). May 21-Jul 14; Aug 19.  
*Apantesis parthenice* G(3), C(2), P(19). Aug 10-Sep 8.  
*Apantesis phalerata* G(65), C(-). Jun 2-17; Aug 6-Sep 7; Oct 13.  
*Apantesis phyllira* G(2). Aug 5-Sep 5.  
*Apantesis virgo* G(7), C(2), P(6). Jul 19-Aug 3.  
*Apantesis virguncula* G(29), C(-), P(17). Jun 13-Jul 27.  
*Arctia caja* C(-), P(1). Aug 7. Two specimens at light at C: Aug 18, 1964; Aug 10, 1966.  
*Cisthene plumbea* C(-). Two specimens at light: Jul 14, 1963; Jul 17, 1967.  
*Clemensia albata* G(2), C(5), P(4). Jun 26-Jul 28.  
*Crambidia casta* C(-). One specimen at light: Aug 23, 1969.  
*Crambidia pallida* C(10), P(168). Jul 27-Sep 4.  
*Crambidia pura* G(22), P(1). Jun 12-26; Aug 6-31.  
*Cynnia tenera* G(10), C(24), P(71). Jun 2-Jul 30.  
*Estigmene acraea* G(103), C(9), P(51). May 24-Sep 4. Probably bivoltine.  
*Euchaetias egle* G(32), C(22), P(29). Jun 4-Aug 2.  
*Euchaetias oregonensis* G(4), C(12), P(21). May 31-Jul 13; Jul 16-Aug 9.  
*Halysidota caryae* G(20), C(19), P(300). May 24-Jul 11.  
*Halysidota maculata* Belleville. Aug 10, 1962. (Carleton University Collection).  
*Halysidota tessellaris* G(75), C(374), P(2734). Jun 3-Aug 27.  
*Haploa confusa* G(47), C(20), P(57). Jul 19-Aug 18.  
*Haploa contigua* G(1), C(11), P(3). Jul 15-28.  
*Haploa lecontei* C(1), P(14). Jun 17-Jul 23.  
*Holomelina aurantiaca* C(9), P(58). Jun 18; Jul 6-Aug 23.  
*Holomelina ferruginosa* G(154), C(50), P(50). Jun 2-Jul 10; Jul 7-Sep 6.  
*Holomelina opella* C(18), P(158). Jun 23-Aug 29.  
*Hyphantria cunea* G(118), C(19), P(192). Jun 1-Jul 21.  
*Hypoprepia fucosa* G(20), C(137), P(832). Jul 9-Sep 13.  
*Hypoprepia miniata* G(3), C(17), P(505). Jul 13-Sep 15.  
*Lycomorpha pholus* C(-), P(3). Jul 14-Aug 10. Common diurnal species, frequently visiting Solidago flowers, Jul 29-Aug 22.  
*Phragmatobia assimilans* G(3), C(22), P(168). May 2-Jun 3.  
*Phragmatobia fuliginosa* G(68), C(12), P(55). May 17-Jun 7; Jul 20-Sep 15. Second brood larger.  
*Pyrrharctia isabella* G(73), C(83), P(165). May 31-Aug 6; Aug 26-Sep 12.  
*Spilosoma congruum* G(1), C(181), P(186). May 14-Jul 4; Aug 22.  
*Spilosoma primum* G(3), C(45), P(115). May 7-Jun 29.  
*Spilosoma virginicum* G(252), C(230), P(463). May 1-Sep 16; Oct 22. Several overlapping generations.  
*Trigrioides bicolor* P(10). Jul 24-Aug 6.

## CITHERONIIDAE

*Anisota finlaysoni* Kingston: Jun 27, 1969 (1♀) (ROM); Otter Lake, Frontenac Co.: Jul 6, 1974 (1♂). Eggs and larvae collected on Quercus in vicinity of Belleville.  
*Anisota rubicunda* C(297), P(1463). May 19-Jul 29; Aug 17-Sep 10.  
*Anisota virgininiensis* C(4), P(29). May 30-Jul 17. Only females at light; males diurnal.  
*Eacles imperialis* C(43), P(76). Jun 12-Aug 8.

## DREPANIDAE

*Drepana arcuata* G(2), C(309), P(636). May 4-Jul 10; Jul 3-Aug 30.  
*Drepana bilineata* G(1), C(91), P(353). May 2-Jun 28; Jul 5-Sep 5.  
*Eudelina herminiata* C(1), P(3). May 31-Jun 12; Aug 12. Locally common in hardwood swamps at P. Jun 7-16.  
*Oreta rosea* G(1), C(13), P(65). Jun 8-Jul 21; Jul 30-Sep 15.

## EPIPLEMIDAE

*Callizia amorata* C(3), P(1). May 31-Jun 29.

## EUCHROMIIDAE

- Cisseps fulvicollis G(96), C(5), P(41). Jun 9-Jul 11; Jul 17-Sep 8; Oct 11.  
 Ctenucha virginica G(243), C(25), P(45). Jun 1-Aug 5; Sep 15.

## GEOMETRIDAE

- Abbottana clemataria G(2), C(154), P(92). May 1-Jun 24.  
 Aethalura anticaria C(64), P(33). May 7-Jun 26.  
 Alsophila pometaria G(83), C(-), P(4). Apr 8-May 7; Nov 4.  
 Common, diurnal spring species in Kingston, Mar 21-May 1. Fewer adults emerge in the autumn.
- Anacamptodes ephyraria C(42), P(108). Jun 25-Aug 10.  
 Anacamptodes vellivolata G(75), C(18), P(40). May 2-Jul 4; Jul 14-Aug 10; Sep 4-23.  
 Anagoga occiduaria C(1), P(25). May 4-Jun 14.  
 Anavitrinella pampinaria G(186), C(28), P(80). May 15-Jul 8; Jul 15-Sep 8.  
 Antepione thisoaria P(32). May 23-Jun 25.  
 Apicia confusaria G(15), C(6), P(57). Jul 6-Aug 6.  
 Bapta glomeraria P(2). May 8.  
 Bapta semiclarata C(-), P(1). May 14. Collected during the day at C, P, and Harrowsmith. May 17-29.  
 Bapta vestaliata G(16), C(16), P(89). May 17-Jun 28; Jul 17.  
 Besma endropiaria C(2), P(33). May 30-Jul 15.  
 Besma quercivoraria C(9), P(85). May 11-Jul 10; Jul 27-Aug 21.  
 Biston cognataria G(34), C(39), P(115). May 20-Aug 26. Frequency of melanic specimens in 1971 at P was 12/73 or 16.4%.  
 Brephephos infans C(-), P(-). Diurnal, early spring species, Apr 11-May 9.  
 Campaea perlata G(12), C(136), P(303). Jun 2-Jul 29; Aug 15-Sep 15.  
 Caripeta angustiorata G(1), C(22), P(43). Jul 15-Aug 15.  
 Caripeta divisata C(2), P(2). Jul 19-Aug 1.  
 Caripeta piniata G(2), C(42), P(179). May 30-Jul 31.  
 Catopyrrha coloraria Wooler. May 9, 1972 (4cc, 298), flushed from Geonothus.  
 Cephis armataria G(1), P(1). Jun 10; Aug 14.  
 Cephis decoloraria C(2). Jun 6-18.  
 Chlorochlamys chloroleucaria G(34), C(24), P(35). May 25-Jul 17; Jul 25-Aug 31.  
 Cingilia catenaria C(5), P(859). Sep 10-Oct 2. Larvae collected on Myrica gale and on ericaceous bog plants; in outbreak proportions on sphagnum bogs at Harrowsmith and westport in 1973.  
 Cleora projecta P(5). May 8-Jun 17. Also reared from larvae on Myrica gale in small sphagnum bog at P.  
 Cleora sublunaria P(1). May 19.  
 Coryphista meadi G(6), C(-), P(1). Aug 9-Sep 13. Larvae on Berberis vulgaris at C. Also attacks ornamental Berberis in urban areas, including Kingston.  
 Cosymbia pendulinaria G(1), C(64), P(227). May 14-Sep 14. Two, partially overlapping broods with peaks in mid-June and early August.  
 Deileinea erythremaria G(1), C(2), P(21). May 29-Jul 2; Jul 26-Aug 30.  
 Deileinea variolaria G(5), C(22), P(57). Jun 8-Jul 15; Jul 13-Sep 3.  
 Diactinia silaceata C(6). May 25-Jun 2; Jul 29-Aug 12.  
 Dichorda irridaria C(13), P(27). May 19-Jun 22; Jul 31-Aug 17.  
 Drepanulatrix liberaria C(4). Sep 6-Oct 12.  
 Dyspteris abortivaria C(1), P(1). Jun 2-15.  
 Dysstroma hersiliata G(1), C(7), P(19). Jun 17-Jul 20.  
 Dysstroma sp. Bedford Mills, westport. Two specimens at light in sphagnum bogs, Jun 23-29, 1973.  
 Earophila vasaliata G(1), C(4), P(22). Apr 20-May 30.  
 Ectropis crepuscularia G(9), C(60), P(92). May 1-Jun 16; Jun 16-Aug 16.  
 Ematurga atomaria P(-). Harrowsmith, Westport. Diurnal bog species, May 24-Jun 26.  
 Ennomos magnarius G(53), C(63), P(367). Jul 28-Oct 22.  
 Ennomos subsignarius G(10), C(134), P(246). Jul 6-Aug 20.  
 Epirrhantis substriataria Wooler. One specimen at light: May 9, 1972.  
 Epirrhoe alternata C(1), P(18). Jun 2-29; Aug 6-Sep 9.  
 Epirrita autumnata C(45), P(18). Oct 5-24.  
 Erannis tiliaria G(47), C(30), P(47). Oct 8-Nov 4.  
 Euchlaena effecta G(2), C(4), P(10). Jun 27-Jul 26.  
 Euchlaena irroraria C(1), P(24). Jun 2-Jul 6.  
 Euchlaena johnsonaria G(3), C(2), P(39). Jul 6-Aug 10.

- Euchlaena marginaria* C(6), P(25). May 14-Jun 20.  
*Euchlaena obtusaria* G(1), C(5), P(2). Jun 2-30.  
*Euchlaena serrata* G(31), C(10), P(7). Jul 9-Aug 5.  
*Eudule mendica* C(1), P(8). Jul 6-Aug 5.  
*Eufidonia discospilata* C(-). Harrowsmith, Westport. Diurnal species, common in bogs, May 24-Jul 8.  
*Eufidonia notatoria* C(5), P(47). May 19-Jul 2.  
*Eugonobapta nivoseria* G(2), C(33), P(189). Jul 2-Aug 8.  
*Eumacaria latiferrugata* G(5), P(4). Jun 6-18; Jul 4-Aug 5.  
*Euphyia centrostrigaria* G(9), C(14), P(34). Jun 24-Oct 22. Apparently two or more generations, commonest in August - October. Possibly a migratory species.  
*Euphyia multiferata* P(3). Jun 7-20.  
*Euphyia unangulata* G(46), C(19), P(25). May 16-Jul 13; Aug 2-Sep 19.  
*Eupithecia affinata* C(2), P(9). Aug 9-Sep 3.  
*Eupithecia castigiata* C(1). Jun 13.  
*Eupithecia coloradensis* P(1). Jun 16.  
*Eupithecia coagulata* P(6). Aug 15-27.  
*Eupithecia columbiata* C(31), P(244). May 1-Jun 11.  
*Eupithecia filmata* P(4). May 7-19.  
*Eupithecia fletcherata* P(146). Aug 8-Sep 2.  
*Eupithecia fumosa* G(5), C(4), P(27). May 9-Jun 22; Aug 3-Sep 4.  
*Eupithecia gibsonata* C(19), P(23). May 7-Jun 28.  
*Eupithecia luteata* P(5). Jun 10-26.  
*Eupithecia miserulata* G(13), C(12), P(45). May 1-Jul 1; Aug 3-Nov 3. Much commoner in autumn; possibly overwinters as adult.  
*Eupithecia misturata* C(1), P(1). May 8; Jul 17.  
*Eupithecia mutata* P(3). Jun 30-Jul 5.  
*Eupithecia palpata* G(1), C(24), P(89). May 14-Jun 27.  
*Eupithecia perpusca* P(b). Jun 17-27; Jul 27.  
*Eupithecia ravocostaliata* G(2), C(b), P(14). May 1-Jun 29.  
*Eupithecia ringdei* P(1). Jun 2.  
*Eupithecia russeliata* P(3). Jun 26-29.  
*Eupithecia satyratea* C(1). Aug 25.  
*Eupithecia sheppardata* C(1), P(2). May 29-Jun 19.  
*Eupithecia sobrinata* G(14), C(27), P(77). Aug 14-Oct 13. Larvae collected on *Juniperus communis*.  
*Eupithecia stratonata* G(1), C(3), P(13). May 19-Jun 19.  
*Eupithecia swetti* P(2). May 16-18.  
*Eustroma nubilata* G(2). Jul 10-Aug 1.  
*Guenaria basiararia* G(1), C(3), P(6). Jun 22-Aug 5.  
*Haematopis grataria* G(51), C(1), P(2). Jun 11-15; Jul 23-Sep 16. Second generation much more prevalent.  
*Heliomata cycladata* C(1). Jun 14. One other record from C: Jun 14, 1967.  
*Hesperumia sulphuraria* C(-). Two specimens at light: Jul 9-12, 1967.  
*Hethemia pistaciaria* G(3), C(69), P(79). May 10-Jun 26.  
*Heterophleps triguttaria* C(-), P(1). Jul 27. Collected diurnally at C: Jul 30, 1969.  
*Homochlodes fritillaria* G(1), P(15). Jun 3-Jul 8.  
*Horisme intestinata* G(1), C(39), P(10). May 21-Jul 1; Jul 14-Aug 24.  
*Hydrelia albifera* P(4). May 30-Jun 17; Aug 13.  
*Hydria undulata* G(1), C(-), P(28). Jun 1-Aug 21.  
*Hydriomena divisaria* C(1). May 3.  
*Hydriomena renuciata* C(13), P(58). May 7-Jun 15; Jul 12-26.  
*Hypagyrtis piniata* C(14), P(46). Jun 9-Jul 30.  
*Hypagyrtis subatomaria* C(1), P(108). Jun 9-Jul 28; Aug 27.  
*Hyperetis alienaria* C(36), P(247). May 8-Jun 26; Jul 30-Aug 6. Only three second generation individuals.  
*Isturgia truncataria* P(-). Harrowsmith, Westport. Common diurnal bog species, May 6-Jun 26.  
*Itame andersoni complex* C(5), P(83). Jun 9-Jul 26. Reared from larvae collected on *Ribes* and *Vaccinium*.  
*Itame brunneata* P(1). Jun 26. Common in sphagnum bog at Westport, Jun 26-27, 1973.  
*Itame exhauspicata* C(6), P(30). Jun 7-Jul 14.  
*Itame pustularia* G(5), C(59), P(536). Jun 30-Sep 4.  
*Itame ribearia* G(3), C(-), P(8). Jul 18-30. Larvae collected on a cultivated *Ribes* sp.  
*Itame subcessaria* C(5), P(44). Jul 6-Aug 1.  
*Itame sulphurea* P(-). Bedford Mills, Portland. Adults diurnal in sphagnum bogs, the males occasionally at light, Jun 11-Jul 29. Also reared from larvae collected on *Myrica gale*.  
*Lambdina fiscellaria* C(6), P(3). Sep 3-Oct 5.  
*Lobophora nivigerata* G(2), C(42), P(108). May 5-Jun 28; Jul 10; Jul 23.  
*Lozogramma subaequaria* C(1), P(29). May 8-Jun 11.

- Lygia ursaria*  
*Lygris diversilineata*  
*Lygris explanata*  
*Lygris serrataria*  
*Lygris testata*  
*Lyctrosis unitaria*  
*Melanolophia canadaria*  
*Melanolophia signataria*  
*Mesoleuca ruficillata*  
*Mesotheta incertata*  
  
*Metanema determinata*  
*Metanema inatomaria*  
*Metarranthis duarria*  
*Metarranthis hypocharia*  
*Metarranthis indeclinata*  
*Metarranthis obfirmaria*  
  
*Metarranthis refractaria*  
*Metarranthis warneri*  
*Nematocampa filamentaria*  
  
*Nemoria bistriaria*  
  
*Nemoria mimosaria*  
*Nepytia canosaria*  
*Nyctobia limiturata*  
*Nyctobia litoraria*  
*Operophtera bruceata*  
  
*Orthofidonia flavivenata*  
*Orthofidonia tinctoria*  
*Palaearctia vernata*  
*Percnoptilota obstipata*  
  
*Perizoma basaliata*  
*Pero honestarius*  
  
*Pero marmorata*  
*Pero morrisonarius*  
*Phaeoura quernaria*  
*Phigalia olivacearia*  
  
*Phigalia titea*  
  
*Plagodis alcoolaria*  
*Plagodis nigrescens*  
  
*Plagodis phlogosoria*  
  
*Plagodis serinaria*  
*Pleurogucha insularia*  
  
*Prochoerodes transversata*  
*Protitame virginialis*  
*Protocharmia porcellaria*  
*Rheumaptera hastata*  
*Scopula cacuminiaria*  
*Scopula enucleata*  
*Scopula inductata*  
  
*Scopula junctaria*  
*Scopula persimilis*  
  
*Selenia alciphearia*  
*Semiothisa aemulataria*  
*Semiothisa bicolorata*  
*Semiothisa bisignata*  
*Semiothisa gnophosaria*  
*Semiothisa marmorata*  
*Semiothisa mellistrigata*  
*Semiothisa minorata*  
*Semiothisa neptaria*  
*Semiothisa ocellinata*  
*Semiothisa orillata*  
*Semiothisa oweni*  
*Semiothisa pinostrobata*  
*Semiothisa sexmaculata*
- G(8), C(5), P(157). Apr 12-Jun 5.  
G(32), C(40), P(38). Jul 9-Sep 15. Includes form *gracilineata*. Reared from larvae on *Vitis*.  
C(20), P(77). Jun 30-Aug 14; Sep 23.  
G(1), P(0). Jul 9-27.  
C(1), P(2). Sep 14-30.  
G(2), C(19), P(30). Jun 24-Jul 19.  
C(4), P(18). May 29-Jun 23.  
G(2), C(21), P(22). May 4-Jun 24.  
C(2), P(2). May 21-Jun 7; Aug 9-13.  
C(-), P(-). Harrowsmith, Washburn, westport, Portland. Adults diurnal, on bogs and dry heaths, Apr 26-Jun 2.  
C(-). One specimen at light: May 23, 1973.  
C(43), P(117). May 14-Jul 6; Jul 14-Aug 25.  
G(5), C(3), P(22). May 4-Jun 18.  
C(2), P(7). May 21-Jun 10.  
G(1), C(12), P(3b). May 24-Jun 23.  
C(-), P(1). Jun 7. Adults normally diurnal, on dry heaths or bogs at C, P, and Westport, May 10-Jun 5.  
G(1), C(1c), P(19). May 31-Jun 20.  
G(3), C(1), P(11). Jun 10-29.  
G(4), C(20), P(45). Jul 3-Aug 3. Includes three of form *chagnoni* from P.  
G(10), C(170), P(75C). May 1-Jun 17; Jul 9-Aug 17; Sep 15.  
C(12), P(13). May 28-Jun 19; Oct 27.  
G(4), C(20), P(4). Aug 8-Sep 20.  
C(-), P(30). Apr. 19-May 19.  
G(1), C(12), P(15). May 3-28.  
G(4), C(-), P(-). Nov 2-3. Common late fall species at C (Oct 31-Nov 8).  
C(7), P(188). May 1-29.  
P(1). Jun 9.  
G(66), C(20), P(28). Apr 8-May 29.  
G(47), C(9), P(3b). May 18-Nov 3. Commonest in September and October; possibly migratory.  
C(1). Jul 20.  
G(820), C(41), P(83). May 10-Jul 4; Jul 26-Oct 11.  
P(2). Aug 11-12.  
C(7), P(2). May 31-Jun 25.  
G(1), C(1), P(11). May 23-Jun 30.  
G(4), C(7), P(70). Apr. 12-May 19. All males, no melanics.  
G(38), C(31), P(118). Apr 12-May 27. All males; frequency of melanic specimens in 1971 at P was 5/100 or 5.0%.  
C(38), P(152). May 8-Jun 18.  
C(-), P(1). Jun 10. One specimen at light at C: Jun 20, 1973.  
G(2), C(174), P(147b). May 1-Jun 25; Jul 5-Aug 14.  
C(2b), P(100). May 10-Jun 17.  
G(21), C(55), P(36). May 31-Oct 25. Apparently several overlapping generations.  
G(1), C(53), P(136). Jul 29-Sep 15.  
G(1), C(8), P(308). May 8-Jul 16; Jul 23-Sep 4.  
C(6), P(9). Jun 27-Jul 23.  
C(-). One specimen at light: Jul 1, 1973.  
G(7), C(1), P(-). Jul 4-Aug 14.  
G(11), C(55), P(260). Jun 29-Aug 19.  
G(70), C(27), P(8). May 31-Jul 17; Aug 4-Sep 14.  
P(1). Jun 18.  
G(-). One male reared from mature wandering larva collected Apr 6, 1970.  
P(1). May 8  
C(-), P(57). May 29-Jun 29; Jul 24-Sep 2.  
C(12L). May 31-Aug 28.  
G(7), C(394), P(2741). May 25-Sep 16.  
C(1). Jun 16.  
C(2). Jul 18-20.  
G(3), C(3), P(1). May 31-Aug 14.  
G(9), C(160), P(1051). May 14-Sep 2.  
C(1), P(1). Jun 2-7.  
C(1), P(1). Aug 16-20.  
C(3), P(20). May 25-Jun 3; Jul 26-Aug 22.  
C(1), P(15). May 31-Jul 8; Jul 29-Aug 13.  
C(50), P(119). May 29-Sep 14.  
G(3), C(4), F(36). May 19-Jun 30; Jul 23-Sep 5.



- Semiothisa signaria* Bedford Mills, Westport. At light in sphagnum bogs, Jun 23-28, 1973.
- Semiothisa submarmorata* Westport. Common at light in sphagnum bog, Jun 27-29, 1973.  
C(1). Jul 20.
- Semiothisa transitaria* C(2), P(9). Jun 13-Jul 9; Aug 9.
- Semiothisa ulsterata* G(1), C(25), P(16). Jul 2-23.
- Sicya macularia* P(1). Jun 7.
- Spargania magnoliata* C(-). One specimen at light: Jun 5, 1967.
- Stenoporpia polygrammaria* P(13). Jun 5-Jul 3.
- Sterrha demissaria* P(37). Jul 25-Aug 20.
- Synchlora aerata* G(8), C(3), P(3). Aug 11-31. - Once in the spring at C: Jun 20, 1973.  
C(5), P(33). May 18-Jul 2.  
C(1), P(8). Jun 1-29.
- Tacparia detersata* G(24), C(47), P(98). May 16-Jul 1.
- Tacparia zalissaria* G(4), C(-), P(4). Jun 2-29.
- Tetracis cachexiata* G(3), C(2), P(9). Sep 11-Oct 1; May 2.
- Tetracis crocallata* G(17), C(113), P(41). Oct 3-Nov 3.
- Thera contracta* Larvae common on *Juniperus communis*.  
C(-), P(-). Common diurnal species in wooded locations, May 18-Sep 14.
- Thera junipereta* C(-), P(1). Aug 16. Three specimens at light at C: May 1-15, 1971. Adults found hibernating in cave near P.
- Trichodezia albovittata* C(339), P(435). Apr 29-Jun 1.
- Triphosa haesitata* C(7), P(17). Aug 13-Sep 9.  
G(20), C(30), P(72). May 14-Jun 24; Jul 15-Sep 20.  
P(1). Aug 30.
- Venusia comptaria* C(2), P(7). May 15-Jun 2; Jul 4-Aug 5.
- Xanthorhoe emendata* G(9), C(8), P(17). Jun 23-Jul 27.
- Xanthorhoe ferrugata* G(8), C(7), P(24). Jun 17-Aug 24.  
C(16), P(21). May 10-Jul 7; Jul 20-Aug 7.
- Xanthorhoe iduata*
- Xanthorhoe lacustrata*
- Xanthotype sospeta*
- Xanthotype urticaria*
- Kystrota ferruminaria*
- LASIOCAMPIDAE**
- Epionaptera americana* G(8), C(60), P(154). May 1-Jun 30; Jul 7-Aug 12.
- Malacosoma americanum* G(169), C(201), P(1190). Jun 15-Aug 1.
- Malacosoma disstria* G(2), C(86), P(132). Jun 26-Jul 31.
- Tolyte laticis* G(23), C(299), P(526). Jul 23-Sep 30.
- Tolyte vellea* G(59), C(348), P(167). Aug 15-Oct 15.
- LYMANTRIIDAE**
- Orgyia definita* C(20), P(25). Aug 15-Oct 9.
- Orgyia leucostigna* P(3). Aug 5-Oct 22. Common in Kingston in the fall of 1970, egg masses conspicuous on shade trees, especially *Acer saccharinum*.  
G(1), C(3), P(32). Jul 1-Aug 18.  
C(1), P(48). Jul 5-Aug 27.
- Parorgyia basiflava* G(9), C(40), P(460). Jul 6-Sep 1.
- Parorgyia dorsipennata* G(3), C(48), P(101). Jun 26-Aug 15.
- Parorgyia obliquata* G(7), C(44), P(200). Jun 11-Aug 27.
- Parorgyia plagiata*
- Parorgyia vagans*
- NOCTUIDAE**
- Abagrotis alternata* C(4), P(33). Jul 23-Sep 23.
- Achatodes zese* G(2), P(1). Jul 23-Aug 19.
- Acrionicta afflicta* C(2), P(16). Jun 4-Aug 19.
- Acrionicta americana* G(9), C(86), P(1215). Jun 1-Aug 26.
- Acrionicta dactylina* G(14), C(27), P(168). May 30-Aug 20.
- Acrionicta fragilis* C(1). Aug 9.
- Acrionicta grisea* C(1). Jul 17.
- Acrionicta haesitata* C(13), P(277). Jun 1-Aug 28.
- Acrionicta hasta* G(7), C(27), P(105). May 21-Jul 16; Jul 13-Aug 29.  
C(15), P(57). May 8-Jul 5.
- Acrionicta impleta* G(1), P(17). May 8-Jun 29; Jul 24-Aug 26.
- Acrionicta impressa* G(1). Jun 13.
- Acrionicta sp. near impressa* G(2), C(24), P(106). May 31-Jul 20; Aug 10.
- Acrionicta inclara* G(3), C(36), P(109). Jun 1-Aug 8.
- Acrionicta innotata* G(11), C(21), P(55). May 10-Jun 29; Jul 29-Aug 24. Frequency of melanic or partly melanic individuals in 1971 at P was 28/39 or 71.8%.
- Acrionicta interrupta* G(11), C(55), P(145). May 14-Aug 10. Frequencies of melanic or partly melanic individuals: 14/32 or 43.8% (C, 1970); 20/56 or 35.7% (P, 1970); and 34/89 or 34.8% (P, 1971).  
P(1). May 31.
- Acrionicta laetifica* C(18), P(39). May 18-Jul 9; Jul 26-Aug 16.
- Acrionicta lanceolaria*
- Acrionicta lepusculina*

- Acronicta lithospila* P(10). Jun 14-Jul 27.  
*Acronicta lobeliae* G(1), C(6), P(9). May 16-Jun 30.  
*Acronicta morula* G(3), C(24), P(104). May 20-Aug 9.  
*Acronicta noctivaga* G(16), C(19), P(82). May 14-Jul 6; Jul 23.  
*Acronicta obliqua* G(1), C(13), P(55). May 29-Jul 16; Aug 7-29.  
*Acronicta ovata* G(1), C(52), P(875). Jun 9-Sep 7.  
*Acronicta pruni* G(22), C(-), P(3). Jun 1-Jul 10; Aug 13-Sep 6.  
*Acronicta radcliffei* P(4). May 21-Jul 3.  
*Acronicta retardata* G(2), C(3), P(19). Jun 10-Jul 30; Aug 20.  
*Acronicta sperata* G(49), C(1), P(20). May 24-Jul 20.  
*Acronicta superans* C(4), P(16). May 25-Jul 15; Jul 27-Aug 6.  
*Acronicta tristis* C(51), P(253). May 31-Aug 22; Sep 20.  
*Acronicta tritona* C(1), P(29). May 31-Jun 22; Jul 23-Aug 21.  
*Acronicta vinnula* G(25), C(7), P(16). May 21-Jun 26; Jul 23-Aug 18.  
*Adita chionanthi* G(3), C(14), P(35). Aug 18-Oct 13.  
*Agriopodes fallax* C(-), P(2). Jul 3-9. One specimen at light at C: Jul 12, 1967.  
*Agroperina dubitans* G(3), C(2), P(6). Jul 3-Sep 12.  
*Agroperina helva* P(8). Aug 8-19.  
*Agrotis gladiaria* G(32), C(2). Jul 30; Sep 5-23.  
*Agrotis venerabilis* G(15), C(11), P(8). Sep 5-Oct 2.  
*Agrotis vetusta* G(1), C(1), P(1). Aug 27-Sep 13.  
*Agrotis volubilis* G(131), C(31), P(62). May 24-Jul 5; Jul 24.  
*Agrotis ypsilon* G(226), C(48), P(112). May 8-Nov 3. Commonest in late summer and fall; apparently several overlapping generations.  
*Alabama argillacea* G(3). Oct 2. Migrant from the south.  
*Aletia oxygala* G(238), C(3), P(19). Jun 9-Jul 14; Jul 25-Oct 7.  
*Amathes badinodis* G(21), C(-). Sep 5-Oct 2.  
*Amathes bicarnea* G(4), C(2), P(11). Jul 31-Sep 3.  
*Amathes c-nigrum* G(5866), C(291), P(447). Jun 1-Nov 3. Several overlapping generations; probably more than one species involved.  
*Amathes collaris* C(-). Two specimens at light: Aug 28, Sep 1, 1967.  
*Amathes normaniana* C(5), P(42). Jul 13-Sep 27.  
*Amathes opacifrons* P(-). One female at light in sphagnum bog: Aug 16, 1973.  
*Amathes smithi* G(5), C(4), P(3). Aug 12-Sep 12.  
*Amathes tenuicula* G(29), P(1). Aug 8-Sep 7.  
*Amolita fessa* G(3), P(-). Jul 14-25. Two specimens at light in sphagnum bog at P: Jul 13-Aug 17.  
*Amphipoea americana* G(91), C(8), P(9). Jul 24-Sep 12.  
*Amphipoea velata* G(3), C(2), P(9). Jul 13-Aug 17.  
*Amphipyra glabella* G(1), C(20). Jul 23-Sep 25.  
*Amphipyra pyramidoides* G(26), C(31), P(121). Aug 5-Oct 16.  
*Amphipyra tragopoginis* G(228), C(2), P(11). Jul 10-Oct 16.  
*Amyna octo* C(-). Two specimens at light: Sep 17, 1972. Stray from the south.  
*Anagrapha falcifera* G(68), C(3), P(11). May 29-Jul 15; Jul 23-Oct 25.  
*Anaplectoides prasina* G(2), C(3), P(19). Jun 23-Aug 29.  
*Anaplectoides pressus* C(1), P(5). Jun 18-Aug 8.  
*Anathix puta* G(1), C(1), P(1). Aug 14-Sep 2.  
*Anathix ralla* C(18), P(8). Aug 14-Sep 10.  
*Anepia capsularis* C(-), P(1). Jul 26. One specimen at light at C: Jun 10, 1967.  
*Anomis erosa* C(-). One female at light: Oct 11, 1969. Stray from the south.  
*Anomogyna dilvcida* P(10). Aug 24-Sep 14.  
*Anomogyna elimata* G(1), C(32), P(47). Jul 26-Sep 18.  
*Anomogyna youngi* C(1), P(1). Jul 20; Aug 25.  
*Anticarsia gemmatilis* G(1), C(3). Oct 2-12. Migrant from the south.  
*Anytus privatus* G(1), C(-), P(14). Sep 9-30.  
*Apamea alia* P(1). Jul 7.  
*Apamea amputatrix* G(30), C(13), P(34). Jun 29-Aug 14.  
*Apamea cariosa* C(-), P(5). Jun 29-Jul 14. Once at C: Jun 17, 1967.  
*Apamea finitima* G(5), C(2), P(3). Jun 10-29.  
*Apamea impulsa* G(6), C(2), P(1). Jun 26-Jul 25.  
*Apamea inficita* C(1), P(38). Aug 8-Sep 8.  
*Apamea inordinata* G(6). Jun 14-26.  
*Apamea lignicolora* G(55), C(10), P(53). Jun 16-Aug 17.  
*Apamea verbascoides* P(2). Jul 3. One specimen at bait at P: Aug 10, 1971.  
*Apamea vultuosa* C(1), P(3). Jun 15-24; Jul 31.  
*Apharetra purpurea* P(1). Jul 13.  
*Aplectoides condita* P(3). May 31-Jun 9.

- Archanara oblonga G(5), P(3). Aug 16-Sep 14.  
 Archanara subflava P(1). Jul 31.  
 Argyrostromis anilis G(4), C(2), P(70). May 31-Jul 25.  
 Arzama diffusa C(5). Aug 2-12.  
 Arzama obliqua C(12), P(2). May 29-Jun 29.  
 Autographa ampla C(-), P(6). Jul 8-23.  
 Autographa biloba G(-). One specimen at light: Apr 26, 1970.  
 Autographa mappa P(1). Jul 23.  
 Autographa precatationis G(32), C(15), P(17). May 24-Jul 7; Jul 26-Oct 22.  
 Baileya dormitans C(23), P(123). May 19-Jul 23.  
 Baileya doubledayi C(3), P(21). May 31-Jun 12; Jul 13-29.  
 Baileya ophthalmica G(1), C(29), P(220). May 4-Jun 30.  
 Balsa labecula G(30), C(7), P(185). May 20-Aug 8.  
 Balsa malana G(30), C(9), P(16). May 31-Jun 17; Jul 22-Aug 24.  
 Balsa tristigella G(1), C(5), P(14). Jun 1-Jul 9; Jul 31-Aug 13.  
 Bleptina caradinalis G(9), C(18), P(137). Jun 11-Aug 13.  
 Bombycia algens P(1). Aug 21.  
 Bomolocha abalienalis G(3), C(10), P(54). May 21-Jul 16; Jul 25-Sep 12.  
 Bomolocha baltimoralis C(18), P(331). May 19-Jul 23; Jul 27-Sep 19.  
 Bomolocha bijugalis C(2). Jul 14; Aug 22.  
 Bomolocha deceptalis C(73), P(289). May 15-Aug 25.  
 Bomolocha edictalis C(1), P(1). Jun 2; Jul 15.  
 Bomolocha medefactilis C(9), P(11). May 29-Jul 19; Aug 9.  
 Bomolocha manalis C(4), P(7). May 21-Jun 26; Jul 27-Aug 20.  
 Bomolocha palporia C(35), P(703). May 21-Aug 25.  
 Bomolocha sordidula C(5). Jun 15-Jul 9; Jul 31.  
 Caenurgina crassiuscula G(598), C(110), P(43). May 10-Jun 26; Jul 13-Sep 19.  
 Caenurgina erechtea G(460), C(27), P(25). May 2-Jun 24; Jul 16-Oct 20.  
 Calpe canadensis C(1). Jul 19.  
 Capis curvata C(3), P(11). Jun 20-Jul 25; Sep 4.  
 Catabena lineolata G(5), C(1), P(11). May 24-Jul 8; Jul 21-Sep 6.  
 Catocala amatrix G(11), C(5), P(7). Aug 28-Oct 9.  
 Catocala amica C(-). One specimen at light: Aug 10, 1967.  
 Catocala antinymphea C(-), P(2). Jul 22-30. Once at C: Aug 9, 1967.  
 Catocala blandula C(1), P(7). Jul 13-Aug 24.  
 Catocala briseis C(-), P(2). Sep 15-24. One specimen at light at C: Aug 14, 1967. Four specimens collected at bait at P: Aug 12-31, 1971.  
 Catocala cerogama C(16), P(46). Aug 5-Sep 23.  
 Catocala clintonii G(1), C(-). Aug 5. One specimen at light at C: Jul 24, 1967. Also collected at Westbrook, Aug 11, 1963.  
 Catocala coccinata G(2), C(5), P(15). Jul 20-Aug 20.  
 Catocala coelebs C(-), P(7). Jul 23-Aug 17. Larvae collected on Myrica gale in sphagnum bog at P.  
 Catocala concumbens G(8), C(6), P(21). Aug 10-Sep 28.  
 Catocala crataegi G(6), C(5), P(6). Jul 14-Aug 14.  
 Catocala epione C(4), P(142). Jul 16-Aug 25.  
 Catocala gracilis C(1). Jul 20.  
 Catocala habilis G(16), C(88), P(378). Aug 15-Oct 27.  
 Catocala ilia C(15), P(70). Jul 13-Sep 23.  
 Catocala meskei C(-). One specimen at light: Sep 6, 1967; also one male at light at Amherstview: Aug 10, 1972.  
 Catocala mira P(-). One female at bait: Aug 9, 1971.  
 Catocala neogama G(2), C(30), P(102). Aug 8-Oct 21.  
 Catocala obscura G(1), C(1), P(65). Aug 10-Oct 1.  
 Catocala paleogama C(10), P(47). Jul 30-Sep 15.  
 Catocala parta G(4), C(1), P(2). Aug 7-Oct 2.  
 Catocala piatrix G(2), C(1), P(9). Aug 8-Sep 30.  
 Catocala praeclara P(1). Aug 7.  
 Catocala relictata G(1), C(4), P(30). Jul 31-Oct 22.  
 Catocala relecta G(4), C(26), P(141). Aug 14-Oct 25.  
 Catocala similis C(4), P(35). Jul 15-Aug 25.  
 Catocala sordida C(1), P(10). Jul 13-Aug 14.  
 Catocala subnata C(19), P(58). Aug 7-Oct 9.  
 Catocala ultronia G(3), C(9), P(7). Jul 10-Aug 26.  
 Catocala unijuga G(1), C(3), P(18). Jul 23-Oct 9.  
 Ceramicta picta G(2). Jun 14; Aug 17.  
 Cerastis tenebrifera G(-), C(10), P(219). Apr 19-May 28.  
 Cerma cora C(-), P(12). May 30-Jun 18.  
 Chaetoglaea cerata G(3). Oct 2-13.  
 Chaetoglaea sericea G(1), P(6). Sep 20-Oct 22.  
 Chamyris cerintha G(10), C(3), P(10). Jun 15-Jul 28.  
 Charadra deridens G(4), C(74), P(71). May 21-Aug 12.  
 Chrysanymphea formosa C(1), P(9). Jul 2-28.  
 Chrysoaspidia contexta G(51), C(2), P(4). Jun 3-Jul 4; Aug 9-Oct 9.  
 Chrysoaspidia putnami C(2), P(13). Jun 10-Jul 28; Aug 16-Sep 11.  
 Chrysoaspidia venusta G(1), C(1). Aug 5; Sep 15.

- Chytolita morbidalis* C(27), P(87). May 31-Jul 23.  
*Chytonix palliatricula* G(1), C(56), P(302). May 19-Aug 14. Frequency of *f. iaspis* at P was 1/101 or 1.0% (1970) and 4/201 or 2.0% (1971).  
*Chytonix sensilis* C(2), P(28). Jul 25-Aug 22.  
*Colocasia flavicornis* G(2), C(107), P(341). May 1-Jun 18; Jul 29.  
*Colocasia propinquilinea* G(6), C(45), P(37). May 4-Jun 23.  
*Conservula anodonta* P(6). Jul 13-26.  
*Copivaleria grotei* G(1), C(2), P(35). Apr 12-May 29.  
*Cosmia calami* G(1), C(25), P(7). Jul 14-Aug 4.  
*Crocigrapta normani* G(13), C(80), P(812). Apr 29-Jun 13.  
*Crymodes devastator* G(423), C(7), P(7). Jul 3-Sep 20.  
*Cryptia villificans* P(17). Jun 22-Jul 28.  
*Cryptocala acadensis* C(-), P(1). Jul 29. One specimen at light at C: Aug 2, 1968.  
*Cucullia asteroides* G(6). Jul 10-27.  
*Cucullia convexipennis* C(1), P(5). Jun 26; Jul 23-Aug 19.  
*Cucullia intermedia* G(87), C(24), P(27). May 6-Jun 29; Jul 4-Sep 11.  
*Cucullia postera* P(2). Jun 26-Jul 7.  
*Diarsia jucunda* P(1). Jul 18.  
*Diarsia rubifera* P(4). Aug 10-26.  
*Dipterygia scabriuscula* P(1). Jul 20. One specimen at bait: Aug 13, 1971.  
*Dyspyralis illocata* P(4). Jul 31-Aug 26. Collected more commonly at bait at P, especially at dusk, Aug 10-29, 1971.  
*Dyspyralis nigellus* P(4). Jul 11-Aug 1. Also collected at bait at P. Lake Opinicon, one specimen resting among leaf litter: Jul 15, 1973.  
*Elaphria festivoidea* C(68), P(991). May 14-Jul 22.  
*Elaphria versicolor* C(1), P(4). May 25-Jun 15.  
*Energia decolor* C(13), P(8). Aug 5-Sep 23.  
*Energia infumata* C(1). Jul 7.  
*Energia mephisto* C(1). Jul 19.  
*Eosphropteryx thyatroides* G(1), C(-), P(2). Aug 2-Sep 5. One specimen at light at C: Sep 17, 1972.  
*Epiglaea apiata* P(1). Oct 2.  
*Epiglaea decliva* G(3), C(-). Nov 2-3. One specimen at light at C: Nov 8, 1969.  
*Epizeuxis aemula* G(30), C(521), P(2087). Jun 8-Oct 14.  
*Epizeuxis americalis* G(10), C(168), P(229). Jun 9-Oct 14.  
*Epizeuxis concisa* C(1). Aug 3.  
*Epizeuxis diminuendis* C(3), P(60). Jul 6-Aug 12.  
*Epizeuxis forbesi* C(7), P(24). Jul 11-Aug 9.  
*Epizeuxis julia* C(1), P(56). Jul 19-Aug 29.  
*Epizeuxis lubricalis* G(4), C(6), P(106). Jul 10-Sep 3.  
*Epizeuxis rotundalis* G(1), C(162), P(1900). Jul 3-Sep 14.  
*Epizeuxis scobialis* C(5), P(15). Jul 13-Aug 20.  
*Erastria albidula* G(81), C(51), P(120). Jun 18-Aug 14.  
*Erastria bellicula* G(2), C(-), P(3). Jun 27-Jul 2. One specimen flushed in a willow field at C: Jul 10, 1969. A common diurnal species in sphagnum bogs at P, Bedford Mills, Harrowsmith, and Westport. May 25-Jul 3.  
*Erastria carneola* G(62), C(66), P(107). May 24-Jul 15; Jul 16-Sep 19.  
*Erastria concinnimacula* G(1), P(1). Jun 13-19.  
*Erastria muscosa* G(4), C(99), P(170). Jun 13-Aug 29.  
*Erastria synochitis* G(43), C(55), P(35). May 31-Aug 4.  
*Erebus odora* Kingston, two specimens: Sep 23, 1958; Sep, 1961. Stray from south.  
*Euagrotis forbesi* C(5), P(89). Jun 28-Aug 10.  
*Euagrotis illapsa* G(18), C(3), P(20). Jun 9-Jul 4; Aug 8-Sep 7.  
*Eucirrhoedia pampina* C(1), P(18). Sep 2-Oct 16.  
*Euclidia cuspidata* G(7), C(9), P(11). May 28-Jul 17; Aug 18.  
*Eueretagrotis perattenta* P(2). Jul 9-15.  
*Eueretagrotis sigmoides* P(7). Jul 6-27.  
*Euherrichia monetifera* C(9), P(89). May 30-Aug 12.  
*Euparthenos nubilis* C(-). One specimen at light: Jul 9, 1973.  
*Euplexia benesimilis* C(1), P(14). Jun 3-Jul 4; Jul 28-Aug 22.  
*Eupsilia morrisoni* G(4), C(1), P(46). Oct 6-30; Apr 8-May 18. Overwinters as an adult, and like the other congeners, appears to be commoner in the spring.  
*Eupsilia sidus* C(2), P(79). Oct 14-30; Apr 12-May 18.  
*Eupsilia tristigmata* P(17). Oct 27; Apr 12-May 15.  
*Eupsilia vinulenta* C(1), P(23). Oct 8; Apr 12-May 9.  
*Eurois oculata* G(2), C(2), P(16). Jun 10-13; Aug 10-Sep 15.  
*Euthisanotia grata* G(1), C(2), P(3). Jul 8-30; Sep 9.  
*Euthisanotia unio* G(3), C(2), P(6). Jun 10; Jul 5-Aug 26.  
*Eutolyte electilis* G(-), C(5), P(11). Apr 19-May 19. All form *depilis*. Typical form at Frankford: May 15, 1972.  
*Eutolyte rolandi* Wooler, four specimens at light: May 8, 1972.

- Euxoa albipennis* G(1). Sep 6.  
*Euxoa bostoniensis* G(1), P(6). Sep 20-Oct 2.  
*Euxoa detera* G(1), C(1). Sep 4-7.  
*Euxoa divergens* P(1). Jul 27.  
*Euxoa messoria* G(2), P(3). Aug 19-Sep 15.  
*Euxoa obeliscoides* G(5), C(3), P(18). Jul 28-Sep 2.  
*Euxoa perpallita* G(1). Sep 5.  
*Euxoa redimicula* G(6), C(1), P(32). Jul 22-Sep 4.  
*Euxoa scandens* G(2), P(1). Jun 29-Jul 10.  
*Euxoa scholastica* G(4), P(10). Jul 8-Aug 15.  
*Euxoa servita* C(-). One specimen at light: Jul 14, 1969.  
*Euxoa tessellata* G(3), C(10), P(8). Jul 10-Sep 7.  
*Euxoa velleripennis* G(3), P(1). Aug 29-Sep 2.  
*Euxoa* sp. prob ontario P(2). Aug 30-Sep 3.  
*Euxoa* sp. P(3). Aug 9-13.  
*Euxoa* sp. G(1). Jul 16.  
*Exyra rolandiana* P(-). Amherstview, Harrowsmith, Bedford Mills, Westport and Portland. Larvae collected in *Sarracenia purpurea* leaves, Feb 15-Jun 30, and Jul 24-Oct 20. Overwinters in third instar.  
*Faronta diffusa* G(33), C(2), P(25). May 31-Jul 10; Jul 15-Sep 5.  
*Feltia ducens* G(196), C(20), P(18). Jul 25-Sep 21.  
*Feltia geniculata* G(1), C(3), P(93). Aug 7-Sep 7.  
*Feltia herilis* G(2), C(1), P(8). Jul 20-Aug 26.  
*Feltia subguthica* G(61), C(14), P(20). Jul 10-Sep 12.  
*Feralia comstocki* C(2), P(1). May 3-28.  
*Feralia jocosca* C(-), P(2). May 11-16. Two specimens at light at C: May 1, 1970.  
*Feralia major* G(1), C(-), P(9). May 2-15.  
*Fishea enthea* C(-), P(23). Sep 17-Oct 15.  
*Galgula partita* G(15), C(9), P(15). Jun 2-Oct 26. Commonest in late summer and fall.  
*Graphiphora haruspica* G(3), P(8). Jul 23-Aug 12.  
*Haploolophus mollissima* G(1), C(4), P(33). Jun 10-Aug 1.  
*Harrisimenna trisignata* C(-), P(13). Jun 11-Aug 2.  
*Helicoverpa zea* G(4), C(6), P(20). Sep 4-Oct 16.  
*Heliothis phloxiphaga* G(4), P(1). Jun 17: Jul 31-Aug 16.  
*Helotropha reniformis* G(2), C(1), P(2). Aug 17-Sep 5.  
*Hemipachnobia monochromatea* P(1). Jun 25. Common at light in sphagnum bogs at P, Bedford Mills, and Westport, Jun 10-Jul 7.  
*Heptagrotis phyllophora* C(1), P(11). Jul 6-31.  
*Homoglaea hircina* G(-), C(1), P(17). Apr 12-May 11.  
*Homohadena badistriga* G(3), C(8), P(44). Jul 3-Aug 9.  
*Homohadena infixa* C(2), P(1). Jul 6-18.  
*Homorhodes furfurata* C(7), P(15). Jul 4-Aug 7.  
*Hormisa absorptalis* G(7), C(-), P(2). Jul 5-Aug 15.  
*Hormisa bivittata* G(7), C(1), P(1). Jul 14-Aug 14.  
*Hormisa litophora* C(1). Jul 29.  
*Hormisa orciferalis* G(17), C(5), P(4). Jul 6-Sep 18.  
*Hydroecia micacea* G(1). Aug 18.  
*Hypena humuli* G(15), C(3), P(12). May 4-Jul 2; Aug 2-Sep 7. Overwinters as an adult; appears commonest in the spring. Two adults found hibernating in limestone cave near Belleville, Sep 11, 1970.  
*Hypenodes fractilinea* C(-), P(48). Jun 7-Jul 8; Jul 28-Sep 4.  
*Hypenodes palustris* A small dark form, probably this species, is common in sphagnum bogs at P, Harrowsmith, Bedford Mills, and Westport, Jun 21-Jul 8, and Aug 15-Sep 9, at light and easily disturbed in the daytime.  
*Hypocoena inquinata* P(1). Aug 3.  
*Hyppa xylinoides* G(42), C(60), P(99). May 14-Jun 29; Jul 14-Sep 16.  
*Lacinipolia anguina* G(1), C(30), P(166). May 10-Jun 24.  
*Lacinipolia implicata* C(23), P(457). Aug 9-Sep 15.  
*Lacinipolia lorea* G(3), C(-). Jul 2-10. One specimen at light at C: Jun 15, 1967.  
*Lacinipolia meditata* G(42), C(8), P(27). Aug 7-Sep 5.  
*Lacinipolia renigera* G(155), C(23), P(32). Jun 16-Oct 13. Several overlapping generations.  
*Lacinipolia vicina* G(27), C(13), P(27). Jul 8-Aug 9.  
*Lascoreia ambigualis* P(5). Jun 6-18; Aug 18-Sep 2.  
*Lemmeria digitalis* C(1), P(5). Sep 20-Oct 2. One specimen at light at Cranberry Lake: Oct 12, 1969.  
*Leucania commoides* G(143), C(68), P(138). Jun 18-Aug 25.  
*Leucania inermis* C(22), P(41). Jun 1-Aug 7.  
*Leucania insueta* G(24), C(7), P(92). Jun 16-Aug 14.  
*Leucania phragmatidicola* G(324), C(35), P(34). Jun 1-Jul 15: Aug 12-Oct 13.  
*Leucania pseudargyria* G(13), C(28), P(3). Jul 7-Aug 6.  
*Leuconycta diphteroides* G(6), C(11), P(11). Jun 2-Jul 28.

- Leuconycta lepidula*  
*Lithomoia solidaginis*  
*Lithophane amanda*  
*Lithophane antennata*  
  
*Lithophane baileyae*  
*Lithophane bethunei*  
*Lithophane disposita*  
*Lithophane fagina*  
*Lithophane grotei*  
*Lithophane hemina*  
  
*Lithophane innominata*  
*Lithophane laticinerea*  
*Lithophane oriunda*  
*Lithophane patefacta*  
*Lithophane pexata*  
*Lithophane querquera*  
*Lithophane semiusta*  
*Lithophane tepida*  
*Lithophane unimoda*  
*Lithophane sp.*  
*Lomonaites euctalis*  
*Luperina passer*  
*Macronoctua onusta*  
*Magusa orbifera*  
*Marathyssa basalis*  
*Marathyssa inficita*  
*Metalectra discalis*  
  
*Metalectra quadrisignata*  
*Metalectra fishii*  
*Metaleptis salicarium*  
*Metaxaglaea inulta*  
*Mocis texana*  
*Morrisonia confusa*  
*Morrisonia distincta*  
*Morrisonia evicta*  
*Nedra ramosula*  
  
*Neoerastria apicosa*  
*Neoerastria caedua*  
*Neperigea costa*  
  
*Nephelodes emmedonia*  
*Ochropleura plecta*  
  
*Ogdoconta cinereola*  
*Oligia chlorostigma*  
*Oligia exhausta*  
  
*Oligia fractilinea*  
*Oligia illocata*  
*Oligia mactata*  
  
*Oligia minuscula*  
  
*Oligia modica*  
*Oligia semicana*  
*Oncocnemis saundersiana*  
*Oncocnemis viriditincta*  
*Orthodes crenulata*  
*Orthodes cynica*  
*Orthosia alurina*  
*Orthosia hibisci*  
*Orthosia revicta*  
*Orthosia rubescens*  
*Palthis angularis*  
  
*Pangrapta decoralis*  
*Panopoda carneicosta*  
*Panopoda rufimargo*  
*Panthea pallescens*
- C(2), P(7). Jun 7-Jul 10; Aug 13.  
G(1), C(1), P(3). Sep 8-23.  
P(1). Apr 20.  
G(1), C(3), P(10). Sep 21-Oct 13; Apr 30-May 22. Adults of this species overwinter and, like other members of the genus, are more prevalent in the spring months.  
C(-), P(33). Sep 15-30; Apr 12-May 18.  
G(1), P(3). Apr 8-May 19.  
P(2). Apr 27-May 27.  
C(3), P(33). Sep 22-Oct 13; Apr 12-May 17.  
G(7), C(2), P(24). Oct 1-11; Apr 12-May 19.  
C(5), P(31). Oct 21; Apr 19-Jun 5. Frequency of f. lignicosta at P was 26/31 or 83.9%.  
P(1). May 2.  
G(5), C(1), P(16). Oct 21; Apr 8-May 21.  
G(1). Apr 8.  
P(1). May 11.  
P(14). Apr 23-May 25.  
P(1). May 11.  
C(2), P(8). Apr 27-May 23.  
P(1). Apr 23.  
G(6), C(-), P(4). Oct 10; May 3-15.  
G(1). Apr 8.  
C(2), P(2). Jun 27; Aug 2-13.  
G(o). Jun 14-Jul 14.  
G(3), P(4). Sep 7-Oct 7.  
P(137). Sep 6-Oct 14. Migrant from the south.  
G(1), C(37), P(55). May 8-Jun 18.  
G(5), C(46), P(174). May 30-Aug 29.  
C(-), P(3). Jul 29-Aug 10. One specimen at light at C: Jul 24, 1968; another at bait: Jul 15, 1969.  
G(1), C(1), P(11). Jun 10-Aug 7.  
P(4). May 11-21.  
G(-), C(1), P(13). Apr 30-May 18.  
C(1), P(2). Sep 17-21.  
P(1). Sep 13. Stray from the south.  
C(55), P(133). May 1-Jun 12.  
G(-), C(433), P(363). May 1-Jun 7.  
G(3), C(8), P(84). May 1-29.  
G(22), C(124), P(200). May 4-Jun 27; Jul 3-Sep 22.  
G(1). Jun 14.  
C(3), P(4). Jun 1-18; Jul 17-31.  
C(-), P(13). Jun 27-Aug 2. One specimen at light at C: Jun 28, 1972.  
G(83), C(65), P(91). Aug 19-Sep 30.  
G(86), C(42), P(136). May 21-Jul 15; Jul 25-Sep 18.  
G(46), C(6), P(22). Jun 10-Jul 31; Aug 3-Sep 16.  
P(1). Jul 23.  
G(2), P(1). Jul 24-Aug 9. One specimen at light at Amherstview: Aug 2, 1972.  
G(16), P(1). Jul 24-Aug 22.  
P(10). Sep 15-29.  
C(1), P(7). Sep 15-Oct 1. Larva collected on flower of Cypridium calceolus (Jun 2, 1973 at P), and reared on C. acaule; pupated Jun 23, one male emerged Sep 12.  
M(25). Aug 15-Sep 15. Also collected in sphagnum bogs at P, Bedford Mills, and Westport, Jul 29-Sep 6, mostly at light. Form grahami rare at P, common at Westport.  
G(21), C(1), P(6). Jul 23-Sep 26.  
P(6). Jun 28-Jul 26.  
G(1), C(1). Aug 30-Sep 4.  
C(1). Sep 5.  
G(3), C(1), P(72). Jun 25-Sep 5.  
G(1), C(5), P(80). May 18-Jul 11.  
C(1). May 1.  
G(38), C(41), P(107). Apr 12-Jun 10.  
G(5), C(16), P(124). Apr 20-May 31.  
G(1), C(21), P(173). Apr 19-May 24.  
G(12), C(64), P(171). May 21-Jul 6; Jul 20-Sep 15.  
P(47). Jun 10-Aug 28.  
G(2), C(31), P(87). Jun 20-Aug 19.  
C(46), P(89). Jun 9-Aug 13.  
C(126), P(422). May 18-Jul 1; Jul 5-Aug 28. Apparently two generations, the second much more prevalent.

- Papaipema appassionata* P(3). Aug 26-Sep 8. Also collected at light, or as larvae in the roots of *Sarracenia purpurea*, in sphagnum bogs at P. Marlbank, Amherst-view, Bedford Mills, Westport and Portland. Larvae: Jun 30-Jul 18; adults: Aug 25-Sep 6.
- Papaipema cataphracta* G(3). Oct 2-7.  
*Papaipema eupatori* P(2). Sep 27-30.  
*Papaipema furcata* C(1), P(4). Sep 6-27.  
*Papaipema impecuniosa* G(4). Oct 2-6.  
*Papaipema inquaesita* P(5). Sep 15-Oct 9.  
*Papaipema lysimachiae* P(1). Sep 11.  
*Papaipema marginidens* G(1). Oct 11.  
*Papaipema nebris* G(1). Sep 5.  
*Papaipema nepheleptena* C(1), P(1). Sep 14-23.  
*Papaipema pterisii* C(5), P(4). Aug 22-Sep 28.  
*Papaipema purpurifascia* G(1), C(7), P(12). Aug 26-Oct 25.  
*Papaipema speciosissima* P(25). Sep 9-Oct 9. Frequency of f. *regalis* was 6/25 or 24.0%.
- Papaipema unimoda* C(-). One specimen at light: Sep 10, 1968.  
*Paradiarsia littoralis* G(7). Jun 17-Jul 3.  
*Parallelia bistriaris* C(1), P(33). Jun 1-Sep 7.  
*Parastictis discivaria* G(1), P(2). Aug 7-12.  
*Peridroma saucia* G(11), C(5), P(65). Jun 23; Jul 28-Oct 27.  
*Phalaenostola larentioides* G(6), C(7), P(3). Jul 10-31; Sep 3-13.  
*Philometra eumelusalis* P(1). Jul 28.  
*Philometra hanhami* C(1). Jul 17.  
*Philometra metonalis* P(1). Aug 9.  
*Philogophora iris* G(13), C(16), P(30). May 25-Jul 25.  
*Philogophora periculosa* C(4), P(23). Aug 15-Sep 13. Frequency of f. *v-brunneum* at P was 8/23 or 34.8%.  
*Phoberia atomaris* G(1), C(34), P(284). Apr 29-May 22.  
*Plathyepena scabra* G(98), C(15), P(12). Jun 5; Jul 10-Nov 3. Commonest in late summer and fall.
- Platyperigea meralis* P(21). Aug 17-Sep 4.  
*Platyperigea multifera* C(4), P(56). Aug 15-Sep 15.  
*Platypolia anceps* P(3). Oct 1-14.  
*Platysenta vecors* C(1), P(19). May 25-Jun 24; Aug 1-19.  
*Platysenta videns* G(19), C(7), P(22). Jun 2-30; Jul 28-Sep 4.  
*Plusia aerea* G(3), C(2), P(10). Jun 9-Jul 15; Aug 27-Oct 2.  
*Plusia aeroides* G(1), C(1), P(3). Jun 26-Jul 28.  
*Plusia balluca* C(-), P(1). Jul 23. One specimen at light at C: Jul 23, 1967. Also collected once at Kingston: Jul 24, 1963.
- Plusiodonta compressipalpus* G(1). Jul 16.  
*Polia adjuncta* G(161), C(63), P(83). May 12-Jul 13; Jul 24-Sep 7.  
*Polia assimilis* G(2), P(8). Jun 28-Aug 1.  
*Polia atlantica* G(47), P(3). Jun 2-Jul 5; Aug 8-Sep 4.  
*Polia detracta* C(11), P(63). Jun 15-Jul 29.  
*Polia grandis* G(1), C(1), P(16). May 30-Jul 10.  
*Polia imbrifera* P(1). Jul 30.  
*Polia latex* C(9), P(77). May 15-Jul 8.  
*Polia legitima* G(25), C(6), P(11). Jun 11-Aug 5.  
*Polia lilacina* G(9), C(-), P(1). Jun 22-Jul 24.  
*Polia lutra* G(1), C(2), P(46). Jun 1-Jul 15.  
*Polia nimbosea* C(2), P(5). Jul 15-28.  
*Polia obscura* C(4), P(36). May 19-Jun 28.  
*Polia purpissata* G(1), C(2), P(14). Aug 7-27.  
*Polia rugosa* P(-). One male at light in sphagnum bog at P: Jun 21, 1973.  
*Polia segregata* C(2), P(26). Apr 12-May 19.  
*Polia subjuncta* G(37), C(2), P(16). Jun 7-Sep 14.  
*Prodenia ornithogalli* G(2), C(-). Sep 7-Oct 11. One specimen at light at C: Nov 1, 1969; another at bait: Oct 12, 1970.
- Protogrotis niveivenosa* G(10), P(1). Aug 2-19.  
*Protocryphia secta* C(-), P(78). Jun 9-Aug 5.  
*Protolampra brunneicollis* G(4), C(1). Jul 3-13; Aug 18-26.  
*Protorthodes curtica* C(1). Jul 15.  
*Protorthodes oviduca* G(15), C(26), P(30). May 23-Jul 12.  
*Proxenus miranda* G(67), C(7), P(28). May 28-Jul 1; Jul 29-Sep 4.
- Psaphida resumens* C(3), P(39). Apr 12-May 18.  
*Psectraglaea carnosae* P(3). Sep 17-27.  
*Pseudaletia unipuncta* G(649), C(137), P(67). May 8-Nov 4. Several overlapping generations.
- Pseudeva purpurigera* G(10), C(6), P(11). Jul 7-Sep 5.  
*Pseudoplusia includens* G(8), C(4), P(19). Sep 6-Oct 9.  
*Pyreferra citromba* C(1), P(6). Apr 12-May 18.  
*Pyreferra pettiti* C(7), P(43). Apr 12-May 29.  
*Pyrrhia umbra* G(1), P(1). Jun 20-Jul 17.  
*Raphia frater* G(7), C(224), P(1135). May 14-Aug 23.

- Renia factiosalis* C(10), P(255). Jul 23-Sep 4.  
*Renia flavipunctalis* G(7), C(144), P(823). Jul 10-Sep 15.  
*Renia sobrialis* P(1). Aug 2.  
*Rhynchagrotis anchocelioides* P(1). Aug 14.  
*Rhynchagrotis brunneipennis* P(6). Jul 24-Sep 12.  
*Rhynchagrotis cupida* C(2), P(6). Jul 30-Sep 28.  
*Rivula propinqualis* G(96), C(17), P(29). Jun 11-Jul 25; Aug 6-Sep 15.  
*Schinia florida* C(2), P(1). Jul 21-29. Adults common in flowers of *Oenothera*, the larval foodplant.  
*Schinia marginata* G(1), C(2), P(3). Jul 27-Aug 14.  
*Schinia trifascia* G(1), C(2), P(1). Jul 17-Aug 13.  
*Scoliopteryx libatrix* G(3), C(1), P(2). Sep 1-7; May 1-16. Adults found hibernating in caves at P, Lake Opinicon, and Westport, Aug 30-Oct 25.  
*Scotogramma trifolii* G(10), C(2). Jun 10-Sep 6.  
*Senta defecta* P(1). Jul 24.  
*Sideridis maryx* P(1). Jun 20.  
*Sideridis rosea* G(21), C(3), P(86). May 23-Jul 5.  
*Simyra henrici* G(53), C(4), P(9). May 16-Jun 21; Jul 24-Sep 5.  
*Spaelotis clandestina* G(42), C(-), P(9). Jun 20-Jul 24; Aug 6-Oct 3.  
*Spargaloma perditalis* C(6), P(14). May 30-Jul 13; Aug 3.  
*Spargaloma sexpunctata* G(1), C(34), P(96). May 30-Sep 2.  
*Spodoptera exigua* G(1). Oct 2.  
*Spodoptera frugiperda* G(131), C(5), P(62). Aug 17-Oct 24.  
*Sunira bicolorago* G(50), C(30), P(113). Sep 14-Nov 2.  
*Syngrapha alias* C(1). Jul 20.  
*Syngrapha altera* P(12). Aug 10-Sep 3.  
*Syngrapha epigaea* G(1), P(-), C(1). Aug 14-Sep 5. Reared from larvae on *Myrica gale* in bogs at P and Portland.  
*Syngrapha rectangula* C(1), P(1). Jul 3-9.  
*Syngrapha selecta* P(3). Aug 13-31.  
*Tarache terminimaculata* G(2), P(2). Jun 29-Jul 10; Aug 13.  
*Tarachidia candefacta* G(83), C(2), P(17). Jun 1-Jul 3; Jul 15-Aug 31.  
*Tarachidia erastrioides* G(88), C(4), P(24). Jun 1-Sep 16. Probably two overlapping generations.  
*Trachea delicata* P(1). Jul 22.  
*Tricholita signata* C(2), P(1). Jul 28-Aug 14. One specimen at bait at C: Jul 19, 1969.  
*Trichoplusia ni* G(24), C(-). Aug 16-Oct 11.  
*Trichoplusia oxygramma* P(1). Sep 11.  
*Ufeus satyricus* G(1), C(3), P(5). Sep 9-Nov 4.  
*Ulolonche culea* G(5), C(30), P(180). May 18-Jul 2.  
*Ulolonche modesta* G(1), C(6), P(60). May 14-Jun 17.  
*Xanthia flavago* G(1), C(-), P(7). Sep 17-Oct 11.  
*Xylena cineritia* G(5), P(2). Apr 8-May 15.  
*Xylena curvimacula* G(6), C(4), P(49). Oct 11; Apr 12-May 26. Adult overwinterers.  
*Xylena nupera* G(2), C(-), P(1). Apr 30-May 4. One specimen at bait at C: Sep 21, 1969.  
*Xylomiges alternans* P(15). May 8-30.  
*Xylomiges dolosa* G(-), C(16), P(26). May 1-30.  
*Xylomoia chagnoni* C(1), P(5). Jun 29-Jul 28.  
*Zale aeruginosa* P(8). May 30-Jul 7.  
*Zale cingulifera* C(7), P(19). May 3-30.  
*Zale duplicata* C(11), P(41). May 6-Jun 6.  
*Zale galbanata* G(6), C(4), P(1). May 16-Jun 22; Jul 25.  
*Zale helata* G(1), C(38), P(16). May 19-Jun 29.  
*Zale horrida* G(1), C(2), P(5). Jun 7-Jul 15.  
*Zale lunata* G(1), C(-), P(1). Aug 4; Oct 11. One specimen at light at C: Nov 2, 1969; another at bait: Oct 24, 1970.  
*Zale minerea* G(1), C(168), P(152). May 1-Jun 30.  
*Zale obliqua* C(2). May 8-Jun 1.  
*Zale phaeocephala* C(31), P(42). May 1-Jun 7.  
*Zale unilineata* C(4), P(3). May 11-Jun 11.  
*Zanclognatha cruralis* C(11), P(10). Jun 13-Jul 9.  
*Zanclognatha jacchusalis* C(4), P(4). Jul 12-Sep 9.  
*Zanclognatha laevigata* C(16), P(110). Jul 11-Aug 25.  
*Zanclognatha lituralis* C(2), P(21). Jun 23-Aug 2.  
*Zanclognatha ochreipennis* G(5), C(125), P(887). Jul 10-Sep 14.  
*Zanclognatha protumnusalis* G(4), C(18), P(22). Jul 2-Sep 2.  
*Zenobia pleonectusa* G(1), C(5), P(3). Jul 16-Sep 11.
- NOLIDAE**  
*Celama cilicoides* G(1), C(-). Aug 5. Two specimens at light at C: Jul 6-10, 1970 (ROM).  
*Nola ovilla* C(3). May 12-25.  
*Sarbenia minuscula* G(3), C(9), P(67). Jun 12-Aug 3. Possibly more than one species involved.



## NOTODONTIDAE

- Cerura borealis* C(3), P(33). May 31-Jun 16; Jul 1-Aug 13.  
*Cerura cinerea* G(3), C(49), P(128). May 25-Jul 25; Jul 23-Aug 25.  
*Cerura modesta* G(5), C(13), P(43). May 6-Jun 7; Jul 15-Aug 15.  
*Cerura multiscripta* C(2), P(2). May 30-Jun 19. All females, males apparently diurnal. Reared from larvae collected on *Populus grandidentata*.  
*Cerura occidentalis* G(5), C(17), P(30). May 8-Jul 1; Jul 11-Aug 20.  
*Clostera albosigma* G(3), C(191), P(264). May 3-Jun 25; Jun 22-Aug 23.  
*Clostera apicalis* G(3), C(20), P(19). May 16-Jun 19; Jul 27-Aug 20.  
*Clostera strigosa* C(2), P(4). May 30-Jun 22.  
*Dasylophia thyatiroides* C(4), P(5). May 23-Jun 18; Aug 5-16.  
*Datana angusi* C(23), P(39). Jun 14-Aug 1.  
*Datana contracta* G(9), C(5), P(38). Jun 7-Jul 31.  
*Datana integerrima* C(1). Jul 18. More common in previous years at C: Jun 13-Aug 10.  
*Datana ministra* G(7), C(26), P(101). Jun 2-Aug 2.  
*Datana perspicua* G(11), C(1), P(13). Jul 7-Aug 13.  
*Ellida caniplaga* G(7), C(218), P(120). May 1-Jul 25; Oct 2.  
*Gluphisia avimacula* C(35), P(106). May 2-Jun 11.  
*Gluphisia lintneri* G(3), C(-), P(7). Apr 23-May 11.  
*Gluphisia septentrionis* G(21), C(209), P(535). May 8-Jul 6; Jul 3-Aug 26.  
*Heterocampa bilineata* G(21), C(12), P(23). Jun 2-Jul 10; Jul 23-Aug 26; Sep 27.  
*Heterocampa biundata* C(20), P(28). Jun 8-Jul 31.  
*Heterocampa guttivitta* G(2), C(522), P(484). May 5-Jul 21; Aug 20; Sep 10.  
*Heterocampa manteo* C(-). One specimen at light: Jul 23, 1968.  
*Heterocampa obliqua* C(17), P(65). Jun 2-Aug 8.  
*Heterocampa umbrata* C(49), P(89). May 31-Jul 28.  
*Hyperaeschna georgica* G(1), C(18), P(51). May 14-Jul 14; Aug 10.  
*Macrurocampa marthesia* G(8), C(106), P(386). Jun 19-Aug 25.  
*Nadata gibbosa* G(2), C(215), P(586). May 21-Aug 22.  
*Nerice tibdata* G(26), C(62), P(104). May 14-Aug 22.  
*Notodonta simplaria* G(2), C(5), P(5). May 16-Jun 13; Jul 16-Aug 12.  
*Notodonta stragula* G(9), C(20), P(60). May 31-Jul 10; Jul 18-Aug 17.  
*Odontotia elegans* G(2), C(38), P(46). May 21-Jul 11; Jul 15-Aug 25.  
*Oligocentria lignicolor* C(24), P(244). Jun 13-Aug 16; Sep 3.  
*Peridea angulosa* G(12), C(169), P(543). May 31-Jul 5; Jul 3-Aug 31.  
*Peridea basitrons* C(8), P(38). Jun 13-18; Jul 10-Aug 2.  
*Peridea ferruginosa* G(2), C(165), P(202). May 29-Jun 28; Jun 29-Aug 24.  
*Phaeosia rimosa* G(4), C(113), P(195). May 8-Jul 18; Jul 16-Sep 15.  
*Schizura apicalis* C(-), P(9). Jun 1-10; Jul 13-26.  
*Schizura badia* C(5), P(38). Jun 11-Aug 9.  
*Schizura concinna* G(1), C(2), P(5). Jul 23-Aug 12.  
*Schizura ipomeae* G(4), C(29), P(51). Jun 19-Aug 7.  
*Schizura leptinoides* G(4), C(512), P(1610). May 21-Sep 14. Probably two or more overlapping generations.  
*Schizura semirufescens* G(5), C(41), P(117). Jun 12-Aug 16.  
*Schizura unicornis* G(33), C(83), P(138). May 19-Aug 22.  
*Symmerista albifrons* C(4). Jun 21-22.  
*Symmerista canicosta* C(26), P(66). Jun 8-Jul 23.  
*Symmerista leucityx* C(30), P(39). Jun 7-Jul 17.

## SATURNIIDAE

- Actias luna* G(1), C(142), P(750). May 14-Jul 30.  
*Antheraea polyphemus* G(11), C(19), P(89). Jun 2-Jul 28.  
*Automeris io* G(6), C(101), P(168). May 30-Jul 4.  
*Callosamia promethea* C(-), P(-). Several females at light in 1972 at C. Diurnal males attracted to caged, laboratory-bred females at C and P, Jun 10-Jul 8. Larvae reared on *Prunus*. Previously common in the city of Kingston, feeding on *Syringa*.  
*Hyalophora cecropia* G(2), C(19), P(36). May 29-Jun 20.

## SPHINGIDAE

- Amphion nessus* G(-), C(-), P(-). Diurnal, May 24-Jul 10, visiting flower blossoms (especially *Syringa*) and carrion. Larvae collected on *Vitis riparia*.

- Ceratonia amyntor*  
*Ceratonia undulosa* G(11), C(27), P(67). May 31-Aug 16.  
 G(6), C(176), P(1026). May 8-Sep 7. Bimodal flight period, with peaks in mid-June and mid-to late July.
- Cressonia juglandis* G(1), C(41), P(144). May 14-Jun 19; Jun 29-Aug 1; Aug 26.
- Darapsa myron* G(19), C(39), P(34). May 31-Aug 10. Larvae common on *Vitis riparia*.
- Darapsa pholus* G(2), C(19), P(92). May 21-Aug 12.
- Darapsa versicolor* C(1), P(14). Jun 28-Jul 29.
- Deidamia inscriptum* G(2), C(4), P(6). May 6-30.
- Dolba hylaeus* P(5). Jun 17-Jul 14.
- Eumorpha achemon* G(7), P(1). Jul 3-Aug 14.
- Eumorpha pandorus* C(1), P(7). Jul 10-Aug 14. One larva collected on *Vitis riparia* at Lake Opinicon; formerly common on *Parthenocissus* in Kingston. C(-), P(-). Common diurnal species, May 12-Jul 31, frequently visiting *Syringa* blossoms; observed ovipositing on *Lonicera*.
- Hemaris diffinis* C(-), P(-). Diurnal, May 29-Jun 9, visiting mostly *Syringa* blossoms.
- Hemaris thysbe* C(1). Aug 15.
- Hyles lineata* G(3), C(265), P(664). May 31-Aug 10.
- Lapara bombycoides* G(12), C(-). Jul 16-Aug 12.
- Manduca quinquemaculata* C(27), P(48). May 31-Aug 15.
- Pachysphinx modesta* G(13), C(108), P(238). May 29-Aug 18.
- Paonias excaecatus* G(31), C(60), P(140). May 24-Aug 17.
- Paonias myops* C(58), P(38). May 4-Jun 26; Jul 11; Jul 30.
- Smerinthus cerisyi* G(10), C(23), P(75). May 23-Aug 22. All f. norm. *geminatus* except for two typical *jamaicensis* from P.
- Smerinthus jamaicensis* C(4), P(13). May 6-Jun 19. Larvae collected on *Vitis riparia*.
- Sphecodina abbottii* G(2), C(1), P(5). Jun 12-Jul 29.
- Sphinx canadensis* G(14), C(7), P(102). Jun 10-Aug 22.
- Sphinx chersis* G(37), C(4), P(3). May 31-Aug 5.
- Sphinx drupiferarum* C(-). One male at light: Jul 8, 1974.
- Sphinx eremitus* G(5), C(26), P(126). May 19-Jul 28; Aug 15.
- Sphinx gordius* G(6), C(9), P(32). Jun 1-Aug 13.
- Sphinx kalmiae*
- THYATRIDAE**
- Euthyatira pudens* C(2), P(26). May 1-30. Includes two individuals of form *pennsylvanica* from P.
- Habrosyne scripta* G(1), C(1), P(2). Jul 13-28.
- Pseudothyatira cymatophoroides* C(2), P(2). Jul 14-Aug 1.
- Pseudothyatira expultrix* C(2), P(1). Jun 22-Jul 28. Other records: P, Aug 10, 1971 (at bait), Jun 21, 1973 (at light in bog); Westport, Jun 29, 1973 (at light in bog).
- ZANOLIDAE**
- Apatelodes angelica* C(26), P(272). Jun 8-Aug 11.

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